

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Amended) A cartridge for use in a medication pump, comprising:
a cylindrical barrel comprising an open end and a closed end, wherein the closed end defines an orifice, wherein the open end has an outer edge that is symmetrical about a central longitudinal axis extending from the open end to the closed end; and
a plunger slidably received within the barrel, the plunger comprising a cylindrical wall having an interior cylindrical wall face, wherein a first tab projects inwardly from the interior wall face.
2. (original) The cartridge of claim 1 wherein the plunger further comprises a second tab projecting inwardly from the interior wall face.
3. (original) The cartridge of claim 1 further comprising a removable cartridge rod comprising a shaft and an interface cylinder at one end of the shaft, the interface cylinder defining a first channel for receiving and retaining the first tab of the plunger.
4. (original) The cartridge of claim 3, wherein the first channel of the interface cylinder includes an axial portion disposed parallel to an axis of the shaft and a locking portion disposed in a circumferential direction around an outer surface of the interface cylinder.
5. (original) The cartridge of claim 3, wherein a second tab projects inwardly from the interior wall face of the plunger and the interface cylinder defines a second channel for receiving and retaining the second tab of the plunger.

6. (original) The cartridge of claim 5, wherein the second channel of the interface cylinder includes an axial portion disposed parallel to an axis of the shaft and a locking portion disposed in a circumferential direction around an outer surface of the interface cylinder.

7. (original) The cartridge of claim 1 wherein the barrel further comprises axial guides at the closed end.

8. (original) The cartridge of claim 1, further comprising a cylindrical end wall projecting from the closed end of the cylindrical barrel and surrounding the orifice, the end wall having an interior face and an exterior face.

9. (original) The cartridge of claim 8 wherein the end wall further comprises axial guides on the exterior face of the end wall.

10. (original) The cartridge of claim 9 wherein the end wall further comprises a thread structure on the interior face of the end wall.

11. (original) The cartridge of claim 8 wherein the end wall further comprises a thread structure on the interior face of the end wall.

12. (original) The cartridge of claim 1 wherein the barrel further comprises an exterior barrel wall face extending from the open end to the closed end, wherein the exterior barrel wall face is substantially smooth.

13. (original) The cartridge of claim 1 wherein an outer edge of the open end of the cylindrical barrel defines a circle.

14. (original) The cartridge of claim 13 wherein the open end of the barrel has an outer diameter that is substantially the same as an outer diameter of the remainder of the barrel wall.

15. (original) The cartridge of claim 8 further comprising a tip at the closed end in fluid communication with the orifice.

16. (original) A cartridge barrel for use in a medication pump comprising:
a cylindrical barrel wall comprising an open end and a closed end, wherein the closed end defines an orifice; and

a cylindrical end wall projecting from the closed end of the cylindrical barrel wall and surrounding the orifice, the end wall comprising an interior face, an exterior face, and axial guides on the exterior face.

17. (original) The cartridge barrel of claim 16 wherein the end wall further comprises a thread structure on the interior face.

AK 18. (original) The cartridge barrel of claim 16 wherein the barrel wall is substantially smooth.

19. (original) The cartridge barrel of claim 16 wherein an outer edge of the open end of the barrel wall defines a circle.

20. (original) The cartridge of claim 16 wherein the open end of the barrel wall has an outer diameter that is substantially the same as an outer diameter of the remainder of the barrel wall.

21. (original) The cartridge barrel of claim 16 further comprising a tip at the closed end within the end wall and in fluid communication with the orifice.

22. (original) The cartridge barrel of claim 16 wherein the end wall has an outer diameter that is less than an outer diameter of the barrel wall.

23. (currently amended) A plunger for use within a medication cartridge in a medication pump, comprising:

_____ a closed end;

a cylindrical plunger wall extending from the closed end to an open end, the cylindrical plunger wall having an interior cylindrical wall face and an exterior cylindrical wall face; [and]

a first tab projecting inwardly from the interior wall face;

a second tab projecting inwardly from the interior wall face positioned opposite the first tab; and

* a groove defined in the exterior cylindrical wall face for receiving an O-ring;

wherein, with the exception of the tabs projecting inwardly, the interior cylindrical wall face has a uniform diameter along its length.

24. (currently amended) The plunger of claim 23 wherein the closed end is conical[further comprising a second tab projecting inwardly from the interior wall face positioned opposite the first tab].

25. (currently amended) A removable cartridge rod for use with a medical cartridge in a medical pump, comprising:

a shaft comprising an interface end and a handle end; and

an interface cylinder at the interface end defining a first channel, the first channel comprising an axial portion disposed parallel to an axis of the shaft and a locking portion disposed in a circumferential direction around an outer surface of the interface cylinder, wherein the interface cylinder includes a channel end wall defining a terminal end of the locking portion of the first channel.

26. (original) The cartridge rod of claim 25 wherein the interface cylinder further comprises a second channel for receiving and retaining a portion of a plunger, the second channel comprising an axial portion disposed parallel to the axis of the shaft and a locking portion disposed in a circumferential direction around the outer surface of the interface cylinder.

27. (original) The cartridge rod of claim 26 wherein the axial portions of the first and second channels are positioned on opposite sides of the interface cylinder.

28. (original) The cartridge rod of claim 25 further comprising a grasping flange at the handle end of the shaft.

29-46 (cancelled)

47. (original) A medication cartridge for use in a medication pump comprising:
a cartridge barrel comprising an open end and a closed end, wherein the closed end defines an orifice, the cartridge barrel further comprising a cylindrical end wall projecting from the closed end and surrounding the orifice, the end wall comprising an interior face, an exterior face, and axial guides on the exterior face; and
a plunger slidably received within the barrel.

48. (original) The medication cartridge of claim 47 wherein the plunger comprising a cylindrical wall having an interior cylindrical wall face, wherein a first tab projects inwardly from the interior wall face.

49. (original) The medication cartridge of claim 48 further comprising a removable cartridge rod comprising a shaft and an interface cylinder at one end of the shaft, the interface cylinder defining a first channel for receiving and retaining the first tab of the plunger.

50. (original) The medication cartridge of claim 49, wherein the first channel of the interface cylinder includes an axial portion disposed parallel to an axis of the shaft and a locking portion disposed in a circumferential direction around an outer surface of the interface cylinder.

51. (original) The medication cartridge of claim 47 wherein the end wall further comprises a thread structure on the interior face of the end wall.

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52-55 (cancelled)
